

Novel Hemispherical Scanner for a Coherent Fiber LIDAR System, Phase I

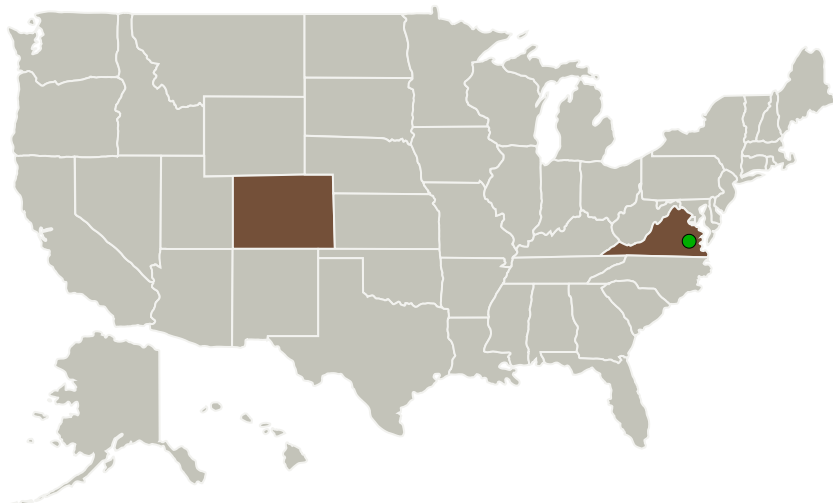
Completed Technology Project (2011 - 2011)



Project Introduction

Sibelloptics proposes to develop an eye-safe, long-range, compact, versatile, all-fiber wind LIDAR system for atmospheric wind velocity measurement applications that is more efficient, and reliable, and at a much lower up-front and lifetime cost than any wind LIDAR system currently available. The hardware for this fiber wind LIDAR system has already been designed and the major components identified. Therefore, it is proposed that, for this Phase 1 SBIR program effort, that Sibelloptics procure all materials for the scanner / telescope, assemble the sub-system, and run a preliminary test.

Primary U.S. Work Locations and Key Partners



| Organizations Performing Work | Role | Type | Location |
|---------------------------------|-------------------------|-------------|---------------------|
| Sibelloptics | Lead Organization | Industry | Lafayette, Colorado |
| ● Langley Research Center(LaRC) | Supporting Organization | NASA Center | Hampton, Virginia |

Primary U.S. Work Locations

| | |
|----------|----------|
| Colorado | Virginia |
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Project Transitions



February 2011: Project Start



September 2011: Closed out

Closeout Summary: Novel Hemispherical Scanner for a Coherent Fiber LIDAR System, Phase I Project Image

Closeout Documentation:

- Final Summary Chart Image(<https://techport.nasa.gov/file/140177>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

SibellOptics

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

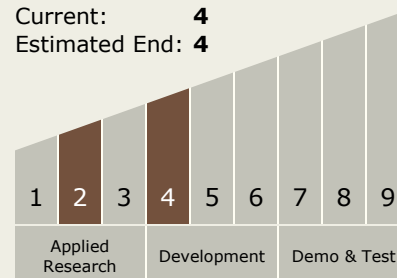
Russ Sibell

Technology Maturity (TRL)

Start: 2

Current: 4

Estimated End: 4



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Technology Areas

Primary:

- TX08 Sensors and Instruments
 - └ TX08.1 Remote Sensing Instruments/Sensors
 - └ TX08.1.5 Lasers

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System